

DATA SHEET



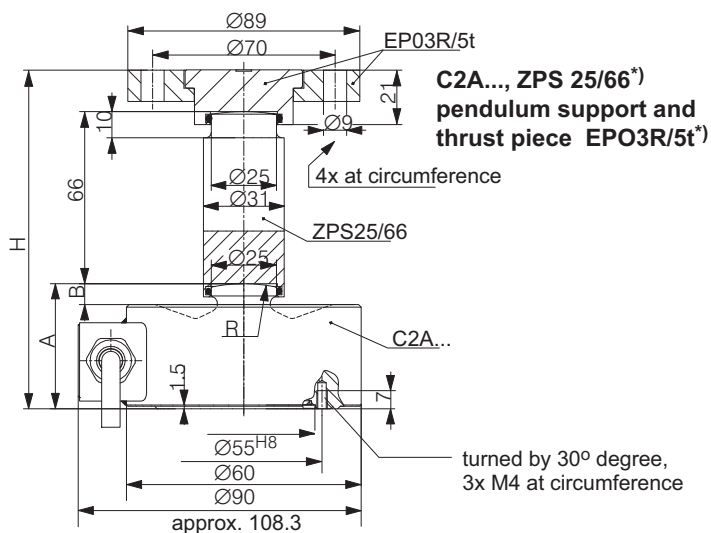
C2A/... Load cells

SPECIAL FEATURES

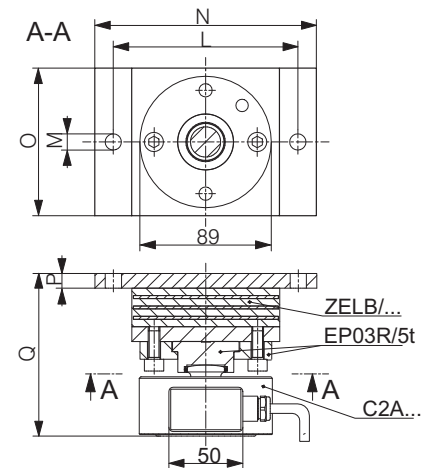
- Load cells and mounting aids made from stainless steel
- Max. capacities: 1 t ... 10 t
- Low profile
- Complies with OIML R60 regulations for up to 4000 verification intervals
- Meets EMC standards according to EN 45 501
- Explosion protection design as per ATEX, IECEx and FM



DIMENSIONS



C2A... with ZELB/...*) rubber-metal bearing and EPO3R/5t*) thrust piece

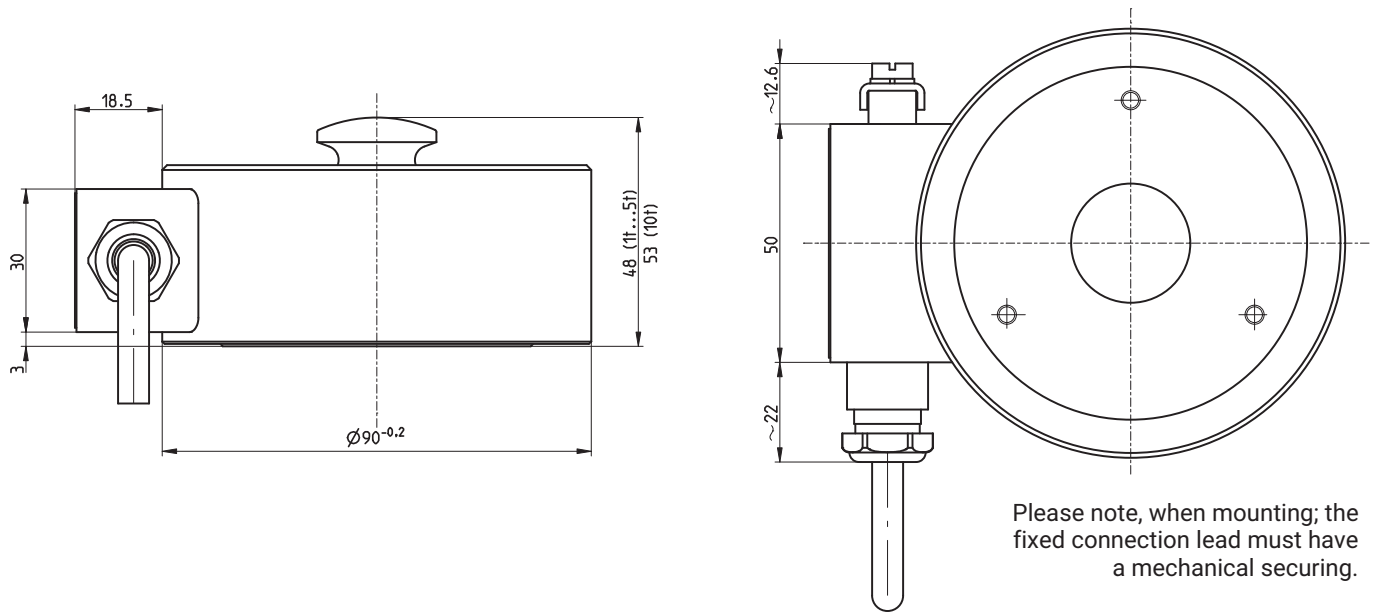


Dimensions (in mm; 1 mm= 0.03937 inches)

Max. capacity	A	B	R	H	S _{max} (mm)	F _R (% of load)	L	M	N	O	P	Q	S _{max} (mm)	F _R (N)
1 t; 2 t	48	10	30; 50	130	±5	1; 1.5	100	9	120	60	10	103	±4.5	400
5 t	48	8	60	130	±5	1.7	125	11	150	100	10	110	±8	620
10 t	53	8	80	135	±5	2.2	175	13	200	100	12	124	±9.5	810

S_{max}: Max. sideways displacement at max. capacity F_R: Restoring force for 1 mm sideways displacement

DIMENSIONS C2A/... (CONTINUATION)



SPECIFICATIONS

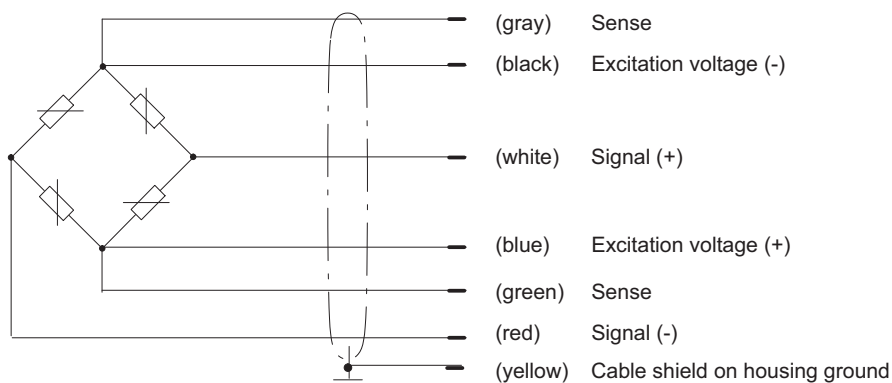
Type		C2A/...		
Max. capacity (E _{max})		1t / 2t / 5t / 10t		
Accuracy class to OIML R60		D1	C3	C4
Max. number of load cell intervals (n _{LC})		1000	3000	4000
Min. load cell verification interval (v _{min})	% of E _{max}	0.0286	0.0100	0.0100
Sensitivity (C _n)	mV/V	2		
Tolerance on sensitivity	%	<±0.1000	<±0.0500	<±0.0500
Temperature effect on sensitivity (TK _C) ¹⁾	% of C _n /10K	<±0.0420	<±0.0080	<±0.0070
Temperature effect on zero signal (TK ₀)	% of C _n /10K	<±0.0400	<±0.0140	<±0.0140
Hysteresis ¹⁾	%	<±0.0500	<±0.0180	<±0.0140
Non-linearity (d _{lin}) ¹⁾	%	<±0.0500	<±0.0170	<±0.0120
Creep (d _{DR}) in 30 min	%	<±0.0500	<±0.0167	<±0.0125
Input resistance (R _{LC})	Ω	340 ... 550		
Output resistance (R ₀)				
For cable lengths 6 m	Ω	356 ±1.5	356 ±0.12	
For cable lengths 12 m	Ω	358 ±1.5	358 ±0.12	
For cable lengths 20 m	Ω	359 ±1.5	359 ±0.12	
Reference excitation volt. (U _{ref})	V	5		
Nominal range of excitation voltage (B _U)	V	0.5 ... 12		
Max. permissible excitation voltage	V	18		
Isolation Resistance (R _{is})	GΩ	>5		
Nominal temperature range (B _T)	°C [°F]	-10 ... +40 [+14 ... +104]		
Service temperature range (B _{tu})	°C [°F]	-30 ... +70 [-22 ... +158]		
Storage temperature range (B _{tl})	°C [°F]	-50 ... +85 [-58 ... 185]		
Save load limit (E _L)	% of E _{max}	150		
Breaking load (E _d)	% of E _{max}	300		
Side load limit (E _{lq})	% of E _{max}	50		

Type		C2A/...		
Accuracy class to OIML R60		D1	C3	C4
Permissible dynamic load (F_{srel})²⁾ (Vibration amplitude to DIN 50100)	% of E_{max}	100		
Deflection at max. capacity, (s_{nom}) ($\pm 15\%$)	mm	0.15 / 0.15 / 0.17 / 0.2		
Weight (G), approx.	kg	1.7 / 1.8 / 1.8 / 1.8		
Protection class (IP) to EN 60529 (IEC529)		IP67		
Material Measuring body Cable gland Cable sheath		stainless steel nickel plated brass, silicone thermoplast. elastomer		

1) The data for Non-linearity (d_{lin}), Hysteresis error (d_{hy}) and Temperature effect on sensitivity (TK_C) are typical values.
The sum of these data meets the requirements according to OIML R60.

2) 70 % with C2A../10 t

WIRING CODE



C2A LOAD CELLS CONFIGURATION

Ordering number		
K-C2A		
1	Code	Option 1: Design
	S	Standard
2	Code	Option 2: Accuracy class
	D1	D1 (OIML)
	C3	C3 (OIML)
	C4	C4 (OIML)
3	Code	Option 3: Maximum capacity
	1	1 t
	2	2 t
	5	5 t
	10	10 t
4	Code	Option 4: Explosion protection
	N	No explosion protection
	AI1/21	ATEX+IECEX+FM Zone 1/21, intrinsically safe; ATEX/IECEX: II 2G Ex ia IIC T6/T4 Gb + II 2D Ex ia IIIC T125°C Db; FM(US/CA): Class I Zone 1 AEx/Ex ia IIC T4 Gb + Zone 21 AEx/Ex ia IIIC T125°C Db; FM(US): Class I, II, III Division 1, Groups A, B, C, D, E, F, G T4 [only with option 6 = N]
	AI2/21	ATEX+IECEX Zone 2/21, not intrinsically safe; ATEX/IECEX: II 3G Ex ec IIC T6/T4 Gc + II 2D Ex tb IIIC T125°C Db [only with option 6 = N]
5	Code	Option 5: Cable length
	S6	6 m (standard) [only with option 3 = 1 / 2 / 5]
	S12	12 m (standard) [only with option 3 = 10]
	12	12 m [only with option 3 = / 1 / 2 / 5]
	20	20 m
6	Code	Option 6: Other
	N	Without

K-C2A	-	S	-		-		-		-		-		-	
		1		2		3		4		5		6		

Not all codes can be combines with each other. Please take heed of the terms in the square brackets!

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